Vol. IV
No. 6

September, 1923

25 Cents
A Copy

LIBRARY
ACADEMY OF MOTION PICTURE
ARTS AND SCIENCES
CALIFORNIA

American Cinematographer

Published by the American Society of Cinematographers, Inc.

In This Issue

Reflectors . . . By Jackson J. Rose, A.S.C.

"Fade Out and Slowly Fade In" . By Victor Milner, A.S.C.

Cinema To Record Eclipse . . By Lenwood Abbott

PUBLISHED IN HOLLYWOOD CALIFORNIA

THAT PERSONAL TOUCH

Cinematographers want their work to bear the stamp of individuality. There's the same difference in cinematography that there is in writing or painting. No two men see a thing alike. Each camera artist wants the screen to reflect the thing he visualized. He wants the laboratory to bring out in negative and prints the subtle effects that give a picture his personal touch.

That's one of the reasons so many cinematographers want their work to go through STANDARD FILM LABORATORIES from camera to screen. Our organization of photographic experts gives them what they want when they want it. Dependable service and intelligent co-operation with the men who make the pictures have been the foundation of our success.

Standard Film Laboratories

John M Nickolaus — *S M Hompkins*

Phone Hollywood 4366

Seward and Romaine Streets
Hollywood, California

Standard Prints

LIBRARY
ACADEMY OF MOTION PICTURE ARTS & SCIENCES
804

Vol. IV SEPTEMBER, 1923 No. 6

American Cinematographer

The Voice of the Motion Picture Cameramen of America; the men who make the pictures

FOSTER GOSS, Editor and Business Manager
Board of Editors—J. A. DUBRAY, H. LYMAN BROENING, KARL BROWN, PHILIP H. WHITMAN
ALFRED B. HITCHINS, Ph. D., F. R. P. S., F. R. M. S., F. C. S., Associate Editor

CONTENTS FOR SEPTEMBER

	Page
"Fade Out and Slowly Fade In"—By VICTOR MILNER, A. S. C.	4
Reflectors—By JACKSON J. ROSE, A. S. C.	5
The Editors' Corner—Conducted by FOSTER GOSS	3
Cinema to Record Total Eclipse—By LENWOOD ABBOTT	11
A. S. C. Presents Premiere Motion Picture Ball	15
In Camerafornia	16
Coolidge Is Pioneer Cinematographer	18
Photographic Biography of STEPHEN S. NORTON, A. S. C.	19
E. I. E. S. Occupies New Club Rooms	20
Releases	26
A. S. C. Roster	27

An educational and instructive publication, espousing progress and art in motion picture photography.

Published monthly by The American Society of Cinematographers, Inc.

Subscription terms: United States, $3.00 a year; Canada, $3.50 a year; foreign, $4.00 a year; single copies, 25 cents.

Advertising rates on application.

6372 Hollywood Boulevard, Los Angeles, California Telephone, Hollywood 4404

(Copyright, 1923, by The American Society of Cinematographers, Inc.)

"Fade Out and Slowly Fade In"

Reminiscences of A. S. C. member and veteran cinematographer

By Victor Milner, A. S. C.

Determination plus ambition equals success.

Typical Nickelodeon of Early Motion Picture Days, 'Crystal Hall,' 14th Street, New York City, at Night. Taken in 1909 by H. Lyman Broening, A. S. C.

When a youngster, my ambition was to he a locomotive engineer. I recall spending many an hour after school watching the New York Central trains enter the underground passage at Park avenua and 90th street in New York City. Tha moving trains, the working of the semaphores, and, above all, tha enginear who controlled the huga locomotiva seemad to enchant me. But no one can rula one's destiny as man has learned many timas before

Although I did not realiza it at the time, my railroad ambitions were slowly bnt is suraly being dipolaced when, in the courae of my youthful fancy, penny arcadas, slot machines and phonographs hegan to cleim my attention But tha last named machanisms did not monopolize my interast permanently but provad to he only transitional hobbies which bridged the gap batwaen the locomotiva and tha "Mutoscopa" which naxt fascinatad me. The "Mutoscopa" was a slot machine offeir which contained a series of "atill picturea which, when "unravelled" gave the effect of cruda motion picturea.

Transitions

I speak of the "Mutascope" as being epochal to ma inasmuch as it marks my first interest in any type of motion pictura and whetted my appetite for tha attractions which wara being offered hy the nickalodeon which was jnst coming into ita own Once I had heen led to tha lure of the nickelodeon, it hald full away over my imaginativa powera and it was not long hefore I abruptly lost practically all interest in tha "Mutascope" and kindred machines which I came to look npon as being distinctly ordinary whan compared to the pictures which were really screened and which really moved

Ways of Earning Nickel

So motion picturas, hesides moving on the screen in the nickalodeon, becama a power of motivetion in my life—that is, they ware the motive for me to earn a nickal whae ever the slightest opportunity prasented itself, whether it was by running errands or whather it was hy halping an old lady, who had too many hundlas to carry hama from a shopping tour

I speak of the nickelodeon as if it were a matter of fact, and such it is, I believe, within tha memory of all those who can recall the days contemporary with the pioneer period of pictures Tha nickelodeon was nsually locatad on tha street corner where it had been transformed by its propriator—in most instancas, a former hntchar or delicatessen keeper perhaps—into a palace of amusement for those who anjoyed its plaasures and a novelty for thosa who deigned to enter its portals in the spirit of tha investigator or explorar.

Nickelodeon "Lobby"

The lobby of the average downtown picture thaatre in tha larger citias today could wall hold the entira confines of the nickelodeon of yeateryear. But that does not mana that tha nickelodeon did not have its "lobby" or "front," as it was better designated then. Walls, ceilings and all of tha front ware "finished" in stamped tin which was white enamelled. Tha color scheme, which was aot atmospherically perfect as that of some of the modern lobbies, was provided by a profusion of lithographic postera which had no connection whatever with the pictnra that was being exhibited inside. They had, instead, heen horrowed from the billposter of soma legitimate melodrama. The posters were often of tha three-sheet size but were cut down, in order to make them fit to the proportions of a one sheet. Across the top of anch nondescript color perpetrations was usually pasted a strip of plain white or Manila paper upon which tha name of the attractions had heen daubed in crude letters.

(Continued on Page 28)

Reflectors

By Jackson J. Rose, A. S. C.

Manipulation of reflectors should be as careful as handling of lights.

Outdoor, exterior or "location" photography, as it may be variously called, is linked inseperably with the use of reflectors. In, fact, location photography has been revolutionized with the advent of reflectors in cinematography. It is well within the memory of us all how the players, in films made ten years or so ago, invariably squinted their eyes and distorted their features, in their efforts to face the sun. Outdoor pictures, as well as virtually all scenes made in those days, had to be filmed in the sunlight, which was depended on as the chief means of illumination.

Within the past five years the use of reflectors has become one of the most important factors in the making of motion pictures. This form of lighting amounts to, in short, "harnessing" the light cast off by the sun and in reflecting such light so that it illuminates some definite part of the scene in question

Face to the Sun

Several years ago it was unheard of to photograph a character with his face away from the sun, except when we wanted a night effect and did not mind if the face was dark That was the usual moonlight effect in those days. How were we to get enough light to make a proper exposure if our players weren't placed in positions where the sun could strike them full in the face? But the disadvantages of shooting characters who looked directly into the sun's rays did not end with the strained appearance of a leading lady who blinked at you from the screen The glare which enveloped the entire scene was just as unpleasant There were no known ways of tempering the glare and the long, bright lines and blotches of light which, super-brilliant, were recorded in the negative. They were not artistically beautiful, to say the least, when they were seen on the screen. Especially so, if the subject wore white clothes. Then it was surely hard for the cameraman to get a pleasing picture, because the contrast was too great—sunlight upon a white dress.

Natural Beauty Essential

Today, however, we bring in a location to the screen with all its natural beauty. The glare in the scenery and the squinting maneuvers of the players' features are not to be seen in the properly photographed scene. The picture is harmonious instead of distracting. As a matter of fact, some of the most beautiful scenes that we see in current motion

Jackson J. Rose, A. S. C.

pictures are taken outdoors. This change of affairs is to be reckoned as a great asset in favor of the photoplay, as sincerity in natural beauty is always enjoyed by the appreciative audience

We have the reflector to thank for this change of affairs—that is, the reflector in the hands of the capable cinematographer who has developed the use of this form of light until it stands on the par with artificial lighting in accuracy and efficiency. The reflector made it possible to film players with their backs to the sun, thus eliminating the odious necessity of their looking at sight-destroying Old Sol With the players' backs to the sun, we are helped to get those beautiful highlights or backlights on the figure, that is, the sun takes the place of spotlights used in the studios At the same time, reflectors, by regulating and tempering the sun's rays, have eliminated the glare which was so distracting in location scenes taken a decade or so ago.

Correct Application Necessary

Reflectors are not to ha regarded in the "bulk"; by that I mean that when the cinematographer needs a reflector he cannot just grab anything that will reflect sunlight and get the results that we view in beautiful exteriors on the screen today. There is a great variety of reflectors just as there is a variety of artificial lights used in the studios, and each form of reflector has its uses just as each kind of artificial light has its special applications. If reflectors were used promiscuously, as indeed they still are in the hands of the inexperienced, we would be no farther advanced in exterior photography at present than we were when reflectors first became known to the cinematographer.

It is only by knowing when and where and why to use some particular form of reflector that the cinematographer is able to produce superb affects for the scene or figure he is photographing, just as it is necessary for him to know when to use Cooper Hewitts, the arc dome, Kliegs, the big spotlight, the baby spot or any of the lights in the studio.

Range of Reflectors

At the present time there are numerous kinds of reflectors employed in production These are, in general, the gold leaf, the silver leaf, polished tin, aluminum, white oil cloth, white cloth or even white paper or newspaper, which I have used in cases of emergency; in fact, anything that will reflect the sun will serve as a reflector, such as a white wall or a white fence when the cinematographer is thrust into tight circumstances But the cinematographer must endeavor to forestall emergencies and be prepared with those kinds of reflectors which he knows he will need in shooting scenes on any particular location for any particular effect.

Reflecting Surface Is Mounted

The materials or metals that reflect the sun's rays are ordinarily mounted on wood, the usual size being about 4 by 4 feet. With the materials and metals so mounted, the "reflector" is formed and is ready for the cinematographer's use

Different Positions

The onlooker at a location scene which is being filmed under the supervision of a capable cinematographer will observe that reflectors may be placed in several different positions—some may be high on artist's easels, others may be propped up on platforms, while still others may be placed on "parallels" several times the height of a man The observer at a similar location scene five years ago would have seen things differently, even when an able cinematographer of the time was in charge of the camera work. He would have seen that reflectors were placed in one position—that they were standing on the ground in all cases.

Placed Too Low

And it was from such placing of reflectors that we experienced so much

Figure 1. (Photographs, Courtesy of Mary Pickford Co.)

trouble when they first came into use. As carefully as we stationed our reflectors—always on the ground—the projection screen would invariably show our players appearing in the most uncanny fashion; there was always something about the scene which was markedly unreal, although there was great improvement brought about through the elimination of the necessity of the characters looking directly at the sun.

At last the cause of the trouble was ascertained. With the reflectors placed on the ground, the "highlights" were below instead of above and the shadows were cast upward instead of downward. Effect of this can be realized by taking a light and putting it at the feet and then by looking at one's self in the mirror and observing the grotesque l i g h t i n g effect which is produced. Our entire appearance is unnatural.

In other words, we are accustomed to having our shadows result from a source, principally the sun, that comes from a position higher than the head. Therefore, if the light of the reflector is thrown from a position that is on a level with the feet or from a direction diametrically opposite from that of the sun or the usual position of artificial lights in everyday life, the resultant effect is both unnatural and unreal and makes the subject anything but pretty. Studio artificial lights, of course, are often placed so that they come from below the level of the characters' heads rather than from above. In such instances, however, the unnatural application is deliberately made in order to attain some desired effect—as in the example of a long nose which may be made to appear shorter when light is thrown on it from below rather than from above, and vice versa, the short nose becomes long when lighted from above. Sunken eyes must be lighted from below or even level with the face, but never from above. The same with hollow cheeks—each face must have its particular lighting.

Figure 2.

So the progressive cinematographer learned to station his reflectors so that they cast natural highlights and shadows. Hence their positions on easel, platform and parallel, as we see them on location scenes today. But before they are ever placed in such positions, the cinematographer has had to study all light conditions with respect to the particular effects that he wants for the scene in question.

In the accompanying illustrations we may observe the difference between the care-

Figure 3. (Photographs, Courtesy of Mary Pickford Co.)

ful and the indifferent handling of reflectors.

Figure 1 shows the improper use of reflectors placed on the ground with little regard to resulting highlights and shadows. Light from these reflectors is cast from a position below the level of the face. Naturally, light, as furnished by the sun, is cast from a position above the face.

Figure 2 illustrates the lighting results of reflectors placed promiscuously on ground as in Figure 1. Note the unnatural "highlights" and shadows below nose and on face caused by lighting character from below instead of from above level of face.

Figure 3 shows arrangement of reflectors placed higher than the head in order to reflect light so as to effect natural highlights and shadows.

Figure 4 illustrates lighting results of reflectors properly stationed, as in Figure 3. Note the absence of unnatural highlights and shadows which appear in Figure 2.

Just as artificial lighting is a most important factor in the filming of an interior set, so the sun's rays, as guided by the reflectors, figure in the matter of "lighting" exteriors. Many and varied lighting effects can be produced by the reflectors just as they may be by the artificial light. Reflected light is much harder to manipulate, however, than artificial, as the cinematographer cannot have the sun's rays turned off or dimmed whenever he so desires, as he may do when artificial light is being used, nor can he guide the sun's rays in other directions except by the use of reflectors. Furthermore, the sun's intensity may vary even while the cinematographer is shooting a scene, so that he must be prepared to meet all such changes while he is using reflectors. The difficult problem presents itself in judging the exposure, because different reflectors give more, or less, light, so great care must be used in their manipulation.

Figure 4.

As a general thing use of reflectors in any specific manner depends almost wholly on the particular demands of the scene that is being shot together with the location at which it is being filmed.

By the manipulation of one or more reflectors either of the same kind or of different kinds, together with mirrors on certain occasions, effects can be produced that startle the imagination. Interiors may be lighted with reflectors in many cases when artificial lights, which would otherwise be used, are not available. Sometimes, when on location,

(Continued on Page 22)

The Editors' Corner

—conducted by Foster Goss

CINEMA GOLD BRICKS

Wildcat promotion schemes, whether they involve gold bricks, oil or motion pictures, do no good for the industries on whicb they feed, no more than they return the promised ricbes to their thousands of victims.

While the motion picture industry may have long since emerged from its infancy, according to various interpretations, it is hy no means virile enough yet to ahsorh a hounty of black eyes inflicted upon it by the "get-rick-quick" promotion outfits which prey upon the popular fancy for films among the rank and file of people. Those who are removed from the important centers of production like Hollywood and New York are still fascinated hy the usually untrue stories concerning the huge fortunes to be made almost overnight in the making of motion pictures.

Therefore, it so happens that from time to time a promoter or a hand of promoters will invade a community whose populace is not sophisticated to the intricacies of picture making, and launch an impressive campaign, which aims to convince the citizens that tbeir particular city is a second Los Angeles in the matter of facilities for motion picture production. The advantages, the propagandists point out, need only capital to be developed and Lickskillet will hecome the cinema center of the universe. All that the good citizens have to do is to buy stock with their good money in Lickskillet's new motion picture producing company; the promoter will he kind enough to handle the money and do the rest.

But the rest too often is not the production of motion pictures. Once the promoters have their bands on the money, the chief concern of the investors hecomes, in the due course of things, to get their money hack, irrespective of the film future of their community. They learn, all too sadly, that the legitimate exploitation of their community and the exploitation of themselves carry entirely different meanings.

Of course, the investor who loses cannot be entirely excused, as he may owe his losses, whether they be large or small, to his own gullihility and lack of penetration. If he is intelligent enough to he desiring to invest his money, he should know whether or not his country and climate are adaptahle to film production. After all, there is only one Southern California; and even New York, which has fallen heir to its present studios largely hecause it was the scene of initial motion picture development, and not because of its natural advantages, is handicapped when it is confronted with a demand for a variety of locations.

But for each fake promotion scheme that is perpetrated on an unsuspecting puhlic, the motion picture industry suffers accordingly, as a whole, no matter if the fiasco took place a thousand miles or two from Los Angeles or New York. The cinema industry, like others, is dependent on the ultimate consumer for its prosperity, and if distrust of the industry spreads among such consumers, the prosperity will dwindle to the red side of tbe ledger, and a great educational and entertaining force will be undermined.

And it must not he forgotten tbat such disasters very materially affect the cinematographers and reputahle organizations which follow a legitimate news, commercial or advertising cinematographic husiness in tbe community wbose local pride has been betrayed.

It is unfortunate that the unscrupulous promoters, in playing their game, are so loud in proclaiming affiliation with the cinema, and that an insignificant or questionable connection or connections with films at one time or another is magnified to suit the particular scheme that may be at hand. When the explosion does come under such circumstances, the fault, because the perpetrators posed as being recognized members of the profession, is laid at the door of the motion picture industry—and each bona fide member thereof suffers proportionately.

CORRECTING A MISUSE

The American Cinematographer takes this means to correct any false impressions which may have arisen as the result of unauthorized use of the name of Arthur Edeson, a member of the American Society of Cinematographers, publishers of this magazine, in conjunction with the announced plans of "The Independent Motion Picture Producing Company" to produce motion pictures at Dayton, Ohio.

In a story which appeared recently in the news columns of the Dayton Evening Herald, it is stated that:

"The first picture to be made for national release by the new company will be 'The Man She Bought,' which will be adapted to the screen by either June Mathis or Anthony Paul Kelly, both of whom are leaders in screen adaptations. Arthur Edeson, cameraman, who took 'The Mark of Zorro' and 'The Three Musketeers,' two of 'Doug' Fairbanks' most successful pictures, will be one of the cameramen for this production."

Mr. Edeson received his first information of his alleged connection with "The Independent Motion Picture Producing Company" from the newspaper clipping. He states that the announcement of his joining with the Dayton company is untrue, that he has no plans of severing his connection with Mr. Fairbanks, nor was he ever approached, through any form of communication, with an offer to become affiliated with "The Independent Motion Picture Company."

Appearing in the August 15th, 1923, issue of the Dayton Evening Herald, a page advertisement announcement of "The Independent Motion Picture Producing Company" is confusing in its use of the names of motion picture celebrities and titles of motion pictures already produced. The advertisement states in part:

"We were indeed fortunate in securing for our director Mr. James A. Fitzgerald, a widely known director, who has for years been connected with America's foremost producing companies, directing such pictures as 'Ignorance,' 'Traffic in Souls,' 'Daddy Long Legs,' and many other feature productions, including Charles K. Harris' 'After the Ball' song and 'On the Shelf,' a Saturday Evening Post story, with Mary Carr as the star."

Grammatically, it might be contended, the advertisement does not say that Mr. Fitzgerald directed the aforementioned productions—it says that he directed productions SUCH AS those that are listed, although the average person would not detect the hairline distinction of words, and naturally believe that he had directed the vehicles.

As a matter of fact, Mr. James A. Fitzgerald did not direct Mary Pickford's "Daddy Long Legs." Marshall Neilan directed Miss Pickford in this production. Probably this confusion of facts explains why the Mary Pickford company is considering legal action on account of the use of the name of Miss Pickford's production in conjunction with the Dayton enterprise.

Likewise, James A. Fitzgerald did not direct "Traffic in Souls,"

(Continued on Page 17)

American Society of Cinematographers

PRESENTS THE

NEW BILTMORE BALL ROOM

FOR THE

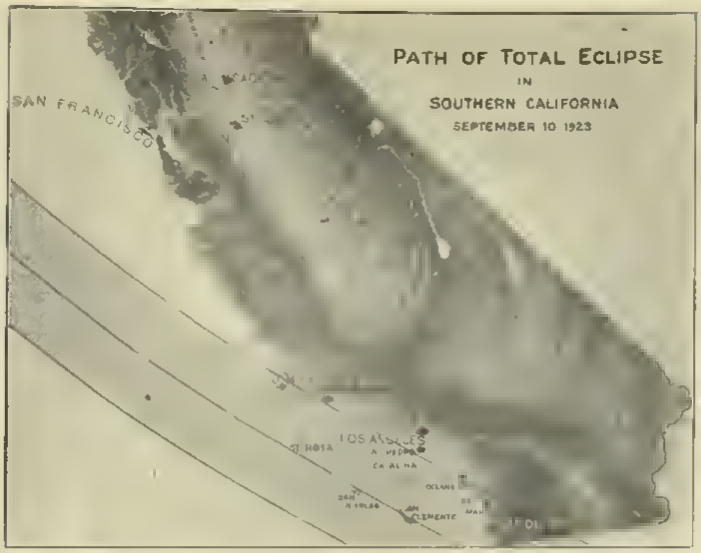
PREMIERE MOTION PICTURE BALL

OF THE SEASON

WITH AN ALL-STAR CAST

TICKETS AVAILABLE NOW

NEW BILTMORE HOTEL, LOS ANGELES
OCTOBER TWENTY-SEVENTH



Cinema to Record Total Eclipse

By Lenwood Abbott

Cinematography to aid scientific research by preserving phenomenon in celluloid

In presenting this article, I do not wish to convey the idea that I am an authority on astronomy; it is only some of the data that may prove interesting and that has been necessary to collect in order to use a motion picture camera with some degree of intelligence.

A total eclipse of the sun will be visible on September 10, about 1 o'clock in the extreme southwest corner of the United States. It will begin at sunrise on the coast of Japan and end at sunset in the Atlantic ocean.

As it travels against the rotation of the earth, the day will be shortened for its duration by about four hours.

1200 Miles Per Hour

This will be the reverse condition of that in which the daring young aviator attempted to fly from New York to San Francisco. Flying with the sun, he could increase the length of his day in proportion to the speed of his machine added to the speed of the surface of the earth travelling at the rate of one thousand miles per hour—that is, flying at the speed of two hundred miles per hour, he would have one-fifth longer day than standing still on the earth's surface, or in reality, he would be travelling one thousand miles per hour with the rotation of the earth, plus two hundred miles per hour with his plane, giving him the tremendous velocity of twelve hundred miles per hour.

An example of the Einstein Theory of relativity.

Owing to the course of the moon on its orbit and the motion of the earth on its axis, the shadow will not have a course running directly from west to east.

The greater part of this eclipse can be seen only from mid-ocean and for that reason, Southern California and Mexico are the most favored locations.

Visibility Better Near Noon

The visibility is always better near the middle of the day as there is less atmosphere to shoot through, in shooting straight up, than there is when an angle is nearer parallel with the earth's surface.

Government Active

In case the day should be foggy or cloudy, the opportunity will not be lost as Lieut. John A. MacReady, the McCook field record-breaking specialist, is going to try a new one. Under orders from Washington, he will nose out of the field in a special photographic airplane and head for the Pacific Coast.

With him will be Captain Stephens, the expert photographer of the air service. He will be equipped with special cameras and will photograph the sun during the eclipse. Thus, the sun will be shot from high altitude.

6000 Miles for One Picture

Two French astronomers have arrived in New York en route to San Diego with equipment made especially for the purpose. These astronomers are traveling six thousand miles to make one picture.

Located at Mt. Wilson, California, is the greatest observatory that has ever been built. Scientists have been coming from the most remote corners of the earth to study the wonders of the heavens from this shrine—yet many of us who live within its shadow have scarcely given it a thought.

The machine shops on South Pasadena street, Pasadena, were built to do the highly precise work necessary for this wonderful observatory on the peak.

I had the pleasure of making pictures of the enormous piece of glass when it arrived from France.

Five Years to Grind Glass

It took six months to cool it after the cast was made, then five years to grind it into the present 100-inch reflector.

The casting on which this reflector is mounted is so enormous that it had to be sent by boat around the Horn and it will always stand out as one of the greatest achievements of the motor truck that all of this equipment was finally landed on top of the mountain without a break.

Mt. Wilson will be out of the path of totality in the coming eclipse so they are now engaged in building another plant at Point Loma in which lenses of about 30-foot focal length will be used.

The large reflector would be of little use, however, as the rays of light used are so near parallel that only a small portion of the moon's surface can be photographed at once.

The Corona

Total Eclipse Area

The sun is about 400 times greater in diameter than the moon and it is also about 400 times as far away—so if you can imagine lines drawn from the opposite sides of the sun, straight past the opposite sides of the moon and continued on to the surface of the earth, you would have a funnel shaped image with a dark shadow projecting from the moon to the earth. The distance between these lines on the surface of the earth would represent the area of total eclipse.

During the coming eclipse these lines will be 105 miles apart, so we will have a path of total darkness 105 miles wide.

Time of Totality

The time of totality is determined by the speed of the rotation of the earth on its axis, which at the latitude of Southern California is about 1000 miles per hour and also upon the motion of the moon on its orbit which is three-fifths of a mile per second.

In the center of the path this will give about three and one-half minutes of total darkness.

At Ensenada, Mexico, or at Clemente Island you will get the full benefit of the longest period of darkness.

Point Conception and Santa Barbara will be within the line of totality. Then it will miss the coast, passing San Pedro, the port of Los Angeles, about one mile out to sea and again coming back to the coast at Torrey Pines. From there on south into Lower California will be an excellent place to view the wonderful phenomenon.

Catalina Island has been chosen by the Los Angeles Astronomical Society as one of the most favorable view points.

Protect Eyes

You will need no telescopes to see the eclipse, but you must protect the eyes.

I have found nothing better than the dense leader stock you can get from your negative rolls after develop-

The Prominences

ing and if one thickness is not dense enough, use as many as are necessary.

Take pieces long enough so you can use both eyes and for convenience in holding I would suggest that you mount the film on a piece of card title card.

In case you wish to use binoculars, it will be better to hold the film at the outer end so as to avoid any possibility of heat.

To cinematographers who may wish to photograph the eclipse, I would suggest that lenses varying from 12 to 24 inches in focal length be used As these lenses are usually of the telephoto type, it may be found that they are not very highly light-corrected—that is, the blues and the reds will not come sharp at the same focus In order to get around this difficulty, you may use color screens, using only one end of the spectrum, that is, red or blue.

Positive Stock Suggested

Another very good way would be to use positive stock which is only sensitive to the blue. The colors during the time of the corona will probably be of the shorter wave length and as the intensity of the light previous to total eclipse will be so great that it will be possible to get it through any color, you can choose your color screen so as to give the greatest advantage to the shorter wave lengths This is only a wild guess as I have never had the opportunity to put it to a test. You will find your exposures of the sun are very, very short; consequently your sky surrounding it will be absolutely dark. This will give a moon-like appearance of the sun when projected on the screen.

What Precedes Totality

What we hope to see at the time of the eclipse is as follows: First, the approaching shadow. This will come sweeping over the earth with a terrific velocity of 25 miles per minute Then, as the surface of the sun is being covered, the darkness deepens. All animal and bird life will go to rest, stars will begin to appear and each little opening between the leaves on the trees will project a crescent shaped sun on the ground.

About 10 minutes before total darkness, the landscape will take on a wierd ashen hue, then five minutes later come the mysterious shadow bands which ripple along at about a three-mile gait.

These waves of light are about three inches wide and about one foot apart.

They may be observed better on a white wall, sidewalk or sheet. There is little known of their origin and they are never seen except for an instant just before the sun is covered or possibly just after.

Moon's Night Side to Earth

The night side of the moon, being toward the earth, will appear as a black disc as it slips exactly in place, covering the sun.

Just the instant the sun is totally covered, the marvelous corona, that mysterious pearly light of which so little is understood, will burst forth.

These streamers of the corona extend out from the sun for vast distances. Some have been observed nine million miles long

In accompanying illustration, you may see red flames that will appear to be extending from the edge of the moon. These are the so-called prominences that are extending from the sun—they are gigantic eruptions of hydrogen, calcium and helium gases These prominces have been successfully photographed by producing an artificial eclipse This is done by placing an opaque mat over the image covering the photographic plate.

These flame-like objects have altitudes ranging from ten thousand to more than three hundred thousand miles.

Next in August, 2045

Then, as the disc of the moon slips past the sun, at the first glimpse of light the corona and gas flames disappear and we will not have another opportunity to view an eclipse in Southern California until August 12, 2045.

(Continued on Page 21)

EASTMAN POSITIVE FILM

To protect the exhibitor against screening, unknowingly, film of inferior photographic quality we make Eastman Positive Film identifiable. The words "Eastman" "Kodak" are stenciled in *black* letters in the transparent film margin. Look for this positive proof that you are projecting the "film that carries quality through to the screen."

Eastman Film, both regular and tinted base, is now available in thousand foot lengths.

EASTMAN KODAK COMPANY
ROCHESTER, N. Y.

New Biltmore Hotel To Be Presented by A. S. C. For Season's Premiere Cinema Ball

The American Society of Cinematographers, according to a current announcement, will present the new Biltmore ballroom for the premiere motion picture ball of the season, to be held at the Hotel Biltmore, Los Angeles, on October 27

Preparations are already proceeding at full blast to make this, the fourth annual A S C ball, the most gorgeous staged by the American Society of Cinematographers

John F Seitz, A S C., is chairman of the ball arrangements and reports that the scale on which the forthcoming affair will be presented, will outrank the most brilliant similar functions ever presented in New York or Los Angeles

Will Surpass Previous Successes

The most successful A. S. C. functions of the past will seem drab in comparison with the Biltmore ball, is the significant announcement made by the Board of Governors inasmuch as it has become an axiom in Southern California as well as in New York motion picture quarters that the previous balls given by the American Society of Cinematographers have been the most elaborate staged in cinema circles, the Biltmore ball will be a brilliant affair indeed if it transcends its notable predecessors

Sumptuousness

The fact that the 1923 ball will be presented in the Biltmore ballroom argues in itself for the sumptuousness of the event. Nearing completion after many months in construction, the Hotel Biltmore is conceded to be the outstanding architectural achievement among hostelries in entire Western America. In addition to the fortune expended for the magnificence of the structure proper, thousands of dollars, it is said, have been expended in decorating the interior in a fashion that is said to establish a precedent even for the most famous hotels of the East and Europe. The zenith of this decorative grandeur will be reached in the Biltmore ballroom which, it is believed, is destined to become as famous as the various rooms of the White House or those of the royal courts across the Atlantic.

Grandeur

The art of the architect and the interior decorator combine for an unbelievable richness of atmosphere in the Biltmore ballroom which, while spacious enough to house with comfort the distinguished assemblage which will be present at the A. S. C. ball, is not marked by the "cold-ness" which so often peculiarly prevails in a large ball or room. On the contrary, the Biltmore ballroom is said to blend stately beauty with an air of comfort, welcome and hospitality.

Coming as it does as not only the premiere motion picture ball of the season but as the premiere cinema ball at the Hotel Biltmore itself, the A. S. C. event is looked to as one of the outstanding events on the social calendar of the entire year. Scarcely had the date been announced when an unexpected initial demand, prompted no doubt by the memory of the previous A. S. C. successes, developed for tickets which met a heavy sale among the various film celebrities.

The occasion of the A S C ball alone is of such a nature that it will bring the attendance of the social world of Southern California as the event virtually opens the Hotel Biltmore.

A WONDERFUL BUY

We are offering a Pathe Studio Model Motion Picture Camera, complete with automatic dissolving shutter, veeder counter, metal fittings in film race, two inch F3.5 Krauss Tessar lens, case for camera, six magazines, case for magazines and accessories, Precision Ball Bearing Tripod, all absolutely brand new, for $700.00

YOU CANNOT GO WRONG AT THIS PRICE

MOTION PICTURE APPARATUS CO.
118 West 44th Street, New York
Telephone Bryant 6635

There is but one lens that can give you an image-quality like that in "The Covered Wagon"

THE GRAF VARIABLE ANASTIGMAT

Anastigmat and PERFECT Soft Focus,—adjustably so, to any usable degree

GRAF OPTICAL COMPANY,
SOUTH BEND Indiana.

Sol Polito, A. S. C., has finished photographing Edwin Carewe's production of "The Bad Man" for First National.

* * *

Andre Barlatier is filming "Ha f-a-Dollar Bill," Max Graf's latest production, which is being produced at San Mateo, Calif.

* * *

Norbert Brodin, A. S. C., will be chief cinematographer for Frank Lloyd, who will produce under his own banner for First National.

* * *

H. Lyman Broening, A. S. C., threatens to develop the hobby of raising Mexican "jumping beans." H. Lyman bought three of the mysterious gallopers in Los Angeles recently, has numbered them and bespeaks loudly for their ability as real racers.

* * *

Fred Jackman and Floyd Jackman, both A. S. C. members, have returned from a location trip to Colorado, where they respectively directed and photographed scenes for Fred's latest production for release through Hal Roach.

* * *

Victor Milner, A. S. C., has joined the staff of Fred Niblo as chief cinematographer.

Ernest Palmer and Reginald Lyons, both A. S. C. members, filmed three days on location scenes for the Warner Brothers' production of "Tiger Rose," which Charles Rosher, A. S. C., is photographing.

* * *

Paul Perry, A. S. C., is filming "The Marriage Circle," which Ernest Lubitsch is directing for Warner Brothers.

* * *

William Marshall, A. S. C., is shooting "The Good Bad Boy" for Principal Pictures Corporation.

* * *

James Van Trees, A. S. C., is filming the First National production, "Flaming Youth."

* * *

Harry Sharp, A. S. C., is photographing the Thomas Ince production, "Annie Christie."

* * *

Don Short, A. S. C., is shooting "Hoodman Blind" for Fox.

* * *

Dan Clark, A. S. C., is filming "A Flying Fool," starring Tox Mix for Fox.

* * *

Rollie Totheroh, A. S. C., has finished photographing "A Woman of Paris," directed by Charles Chaplin and starring Edna Purviance.

(Continued on Page 20)

PHONE HOLLYWOOD 4777

FOR

EFFICIENCY,

SERVICE and

QUALITY in

LABORATORY WORK

Chester Bennett Film Laboratories, Inc.

6363 Santa Monica Blvd.

Hollywood, California

EVERYTHING PHOTOGRAPHIC

Whatever your photographic requirements may be, you will find our stocks most complete.

MOTION PICTURE LENSES

You will find your favorite Lens here in our complete stock, which includes the following:

B & L Ultra Rapid Anastigmat F 2.7
Dallmeyer Pentac F 2.9
Ultrastigmat F 1.9
Carl Zeiss F 3.5
Goerz Hypar F 3.5
Cooke F 3.5

Howland & Dewey Co.

EASTMAN KODAK COMPANY
510 S. Broadway, Los Angeles
Telephones: 66911; Main 6920
545 Market Street, San Francisco

CAMERAS FOR RENT BY DAY OR WEEK

LATE BELL & HOWELL CAMERA OUTFITS
BELL & HOWELL SLOW MOTION CAMERAS
(Rented With Operators)
AKELEY CAMERA OUTFIT
(Rented With or Without Operator)
8x10 STILL AND GRAFLEX CAMERAS

See Us for Your Photographic Needs

Ries Bros

PHOTOGRAPHERS

6035 Hollywood Blvd. Phone Holly 4338.
Hollywood

BASS—CHICAGO

Buys, Sells, Exchanges Cameras, Printers, Lenses. Complete stocks.
Cash for Bell & Howell and De Brie equipment. Catalog Free.

BASS CAMERA COMPANY
109-AC North Dearborn, Chicago, Ill.

EDITORIAL

(Continued from Page 9)

which was really directed by the late George Loane Tucker, who later directed "The Miracle Man."

True enough, a member of the FitzGerald family directed "After the Ball," but the particular FitzGerald who was the director does not happen to be James A. Fitzgerald. The FitzGerald who directed "After the Ball," which was photographed by Ross Fisher, A. S. C., is Dallas FitzGerald, a member of the Motion Picture Directors Association of Los Angeles.

If James A. Fitzgerald did not direct these pictures mentioned in the Dayton advertisement, then what did he direct?

The advertisement reproduces Fitzgerald's photograph, surrounded by those of Ramon Novarro, Seena Owen, E. K. Lincoln, Barbara La Marr, Betty Blythe, Percy Marmont, Anna Q. Nilsson, Martha Mansfield, Alice Brady and Bert Lytell, and announces that SUCH stars AS " 'Senna' Owen, E. K. Lincoln, Anita Stewart, 'Noa L. Berry,' Betty Blythe, Anna Q, 'Nielson,' Ramon 'Navarro,' Wanda Hawley, Betty Compson, 'Mae' McAvoy, Dorothy Gish and Ruby DeRemer, and many others, not listed above, have been submitted to us for our first production."

While a number of the people SUCH AS those mentioned in the foregoing are free lances and might possibly be available for Dayton engagements, it is known that Ramon Novarro, for at least one, is serving the first part of a two-year contract with Metro, with the mutual option of a three-year renewal on its expiration.

Coolidge Is Pioneer Cinematographer; Taught Camera Secrets By Victor Milner, A.S.C.

Calvin Coolidge, 30th President of the United States, is a pioneer amateur cinematographer

The President's active interest in films dates back to the days when many of the leading stars of the present still attended grammar school—back, in fact, to the time when the major ity of the people had not yet begun to take the cinema seriously

It was in the winter of 1912 when Coolidge, who was then winning his spurs as statesman in Massachusetts, visited the famous store of Eberhard Schneider in New York City and bought a motion pictnre camera for his privsta usa.

Victor Milner, now a prom'nent A. S. C. membar, who wee affiliated with the Schneider organization, wee chosen to teach Coolidge the intricacies of hie camera.

Milner had soon taught the future president how to "sat up," iace np the magazines and focus tha lenses. For Coolidge'a convanience, Milner scaled off various differences so that the new camera owner could focus accord-ngiy.

Coolidge having mastered the fnndamentals of operation, Milner proceeded with him to Second avenue and 14th etreet where the A S C. member photographed severel "scenes" in which Coolidge was the sctor, enow ball throwing being the medium of action Aftar this, the pair went to Bryant Park, at Second avenue and 16th atreet, where Coolidge first took over tha manipulation of the camera. In the scanes that followad, Milner becams tha character, go'ng through the antics of a stagger ng drunkard

Coolidge later took the camera north with him and used it during a moose hunting trip. The negativa which he exposed wee sent back to the Schneider plant, where Milner attended to its development.

HARBOR PICTURE TO BE PRODUCED BY STANDARD FILM LABORATORIES AND WORLD TRADERS

Los Angalas, the home of tha motion picture industry, is preparing to tell the world about herself through motion pictures In e two-reel ecreen story, "The Port of Golden Opportunity," the phenomenal davelopmant of Los Angeles harbor, tha marvalous industrial expension of Southern California and the greater growth that is to coma will be nnfolded. This picture 'a being sponsored hy world tradars of Los Angeles and produced by Standard Film Laboratories of Hollywood The story was written and is being directed hy Wedgwood Nowall.

Officials of World Traders, which raprasants some of the biggest business concerns of Southern Califoinia, have foreseen tha far-raaching advertising value to Los Angeles of such e motion picture. Plans are now in the mak'ng for world-wide distrihution of the film eftar it has been completed.

"The Port of Golden Opportunity" sustainad interest in addition to the statistics to be presented

Tha growth of Los Angales harhor has been eo rapid thot comparatively few people have any idea of the amazing developments of recent months.

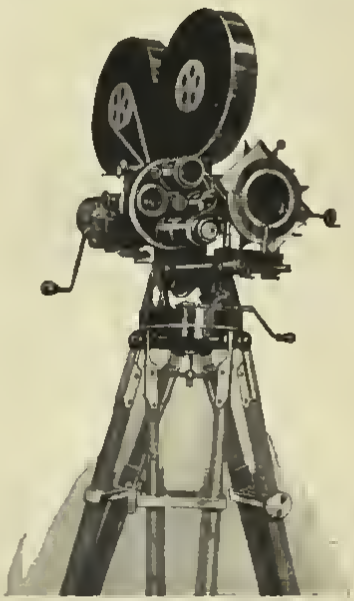
Much of tha act'on of the story takes place at the harhor. Figures telling how Los Angalee harhor compares with other shipping centers will ha presented. The screen story will also reveal the vast trada possihilities with Latin America and the Orient that are within the reach of Southern California business men Many commerc'al and civic orgenisations are co-operating with World Traders and Standard Film Lahoratories to maka this production a suc cass and give Southern California, as well ee the outside world, a greater conception of tha business future thet is ahaad for all in that saction

STANDARD OF THE WORLD

Carl L. Gregory writes from London, "I saw B & H Cameras in Studios in Hawaii, Japan, China, Philippines, Malaya, Burma, India, Italy, Germany, France, England, etc."

Needless to add, they are in use in every country where motion pictures are made, and nearly 100% in the United States.

40 m|m, 50 m|m, & 75 m|m B & L F-2.7 Ultra-Rapid Anastigmat, Carl Zeiss, Goerz, Cooke, Dallmeyer, Graf and other makes of lenses in all focal lengths regularly stocked or specially mounted to order.



Insures Best Results Under Any Conditions

The only camera possessing a PILOT REGISTER MOVEMENT, which is absolutely essential for correct double and multiple exposure photography.

CINEMOTOR—A positive speed regulator.

ULTRA-SPEED ATTACHMENT—The only successful device of its kind.

SYMBOLIC OF STANDARD BELL & HOWELL CINEMACHINERY **SUPERIORITY**

Main Office

New York CHICAGO Hollywood

Stephen S. Norton, A. S. C.

Photographic Biography of Stephen S. Norton, A.S.C.

The American Cinematographer this month presents the photographic biography of Stephen S. Norton, A. S. C., whose career numbers notable achievements in every phase of activity of the cinema camera.

Records show that Norton has photographed the remarkable number of 161 feature productions, innumerable short subjects as well as some of the longest serials to be produced.

For some time, however, Norton's activities have been confined to special features, the latest of which is "The Courtship of Miles Standish," starring Charles Ray, on which he worked in conjunction with Georges Riesrd, A S C, and George Meehan, A. S. C., the staff cinematographers.

Norton's genius first manifested itself in New York City, where he filmed his first 23 productions, after the completion of which, he sojourned to Southern California, where his outstanding successes have been made.

Norton has been identified with the accomplishments of the screen's leading stars, directors and producers. He has been cinematographer for Robert Z. Leonard, Carter De Haven, E. Mason Hopper, Lois Weber, Allen Holubar, Phillips Smalley, Ella Hall, Henry Otto, the late Olive Thomas, William Desmond, Tyrone Power, Roy Stewart, Cleo Madison, Ruth Clifford, Jack Dillon, Pauline Starke, Aime Ruheus, Frank Mayo, Ora Carewe and numerous others.

To stimulate inventive enterprise among laboratory workers, Wetterson R. Rothacker, president of the Rothacker Film Manufacturing Company of Chicago and the Rothacker-Aller Laboratories of Hollywood, has offered an annual prize which each year will go to the person who scores the best idea for improving laboratory practice.

The competition is open to workers in both the Coast and Middle-Western plants.

Whether the idea takes ultimate form in a mechanical contrivance or an improvement in manual method or system, makes no difference. Mr. Rothacker's desire is to encourage invention in any direction that will eventually be reflected in print quality or laboratory service.

ZEISS

Cinematograph Lenses F3.5 in the new spiral mount. All sizes in stock

Harold M. Bennett

U. S. Agent

153 West 23rd Street New York

The New Photographic Store

B. B. NICHOLS, Inc.

Eastman Kodaks and Photographic Supplies

617 SOUTH OLIVE STREET :: LOS ANGELES

Phone Broadway 2531

Cinema Studio Supply Co.

1438 Beechwood Drive

Holly 0819

LIGHTING EQUIPMENT FOR RENT

WIND MACHINES R. (SPEED) HOSTETTER

FOR SALE

Pathe Camera, dissolving shutter, 12 magazines. Zeiss lenses, cases, tripods, etc. Address American Society of Cinematographers or Culver City 529. Price $250.

Camera For Sale

Debrie Camera. 802 June St., Sox Car. Waring and Seward St., Los Angeles. Phone 436-405.

GEORGE MEEHAN

BUCK EWING

ANNOUNCES

OPENING *of* NEW QUARTERS

Portable (Gasoline) Power Plants

Wind Machines

BRING THE STORM TO YOUR SET

Our Side Line

General Machine Shop Work
Truck and Automobile Repairing
Frame Straightening
Cylinder Reboring
Blacksmithing
Welding—Brazing

STANDARD AUTOMOTIVE & MACHINE WORKS

MINERVA PICTURES CORPORATION

Telephone **431-529**

H. M. (BUCK) EWING, Manager 1112 Seward St., (Cor. Santa Monica Blvd.)

E. I. E. S. Occupies New Club Rooms

The Electrical Illuminating Engineers Society is installed in its new headquarters at 1103 El Centro avenue, Hollywood, where spacious quarters have been opened for the membership.

The new club rooms are open to the E I. E S. members at all times, each carrying an individual key. Meetings are held every second Thursday night.

Plans are under way to furnish the headquarters with an elaborate radio outfit, such as only the electrical wizards of the society know how to create Additional plans call for the assembling of an extensive library on studio and motion illuminating subjects.

The E. I. E. S membership includes. N R. Baylor, Cecil Bardwell, Stanley S Bradley, George Breslin, Attorney; Harry D. Brown, Ed Brewer, F G. Carpenter, Ed Chr'st, P. Coate, Harry Collins, Joe Carpenter, R. Daggy, Ray Delaney, H. M. Ewing, Clyde Ewing, Norman J. Freed, W A. Giguerre. Frank Graves, Leo Green, George Hager, Pete Harrod, W L. Harmon, J. C Hoeffner, Roy Hostetter, R. E Honck, William Johnson, L. Johnson, L. Koib, W Lenehan, William P. Lewis, George Mitchell, William Miller, E V. Morris, F N. Murphy, L. Myers, G. E. McCormac. W L McPheeters. R E. Nauman, Neal Jack, James Nelson, George Nelson, J P. G'Donnell, J. C. Reynolds, R. L Simbro, G. T Short, G. Bbour, Elmer Sperry, H. Sylvester, F. S. Testins, T. Thompson, B. Wayne, William Whistler, Gtto K. Giesen, G. W. Calkins, James Buchanan, W. L Wiggins and Charles Monroe.

In Camerafornia

(Continued from Page 16)

Arthur Edeson and Philip Whitman, A. S. C. members, enlisted the services of H. Lymen Broening, Robert Kurrle, Walter Griffin and Joseph Brotherton, all A S. C members, for the filming of spectacular scenes in Douglas Fairbanks' "The Thief of Bagdad"

• • •

Allen Seigler, A. S. C., has returned from New York to Hollywood, where he is attached to the staff of Cosmopolitan.

• • •

E B. DuPar, A. S. C., is filming "George Washington, Jr." starring Wesley Barry, for Warner Brothers

• • •

Sam Landers, A. S. C., is photographing his second production for First National

Perry Evans, A. S. C., is working with him on special work.

• • •

King Grey, A. S. C., is filming the latest Ed Le Saint production.

• • •

Robert Newhard, A. S. C., has returned to Hollywood from New York City "The Hunchback of Notre Dame," which Newhard filmed, is to be given its premiere shortly.

• • •

Jackson J. Rose, A S. C., is perfecting an invention, the completion of which will be of great value to cinematography.

Cinema to Record Total Eclipse

(Continued from Page 13)

Photography Depended On

Photography has advanced to such an extent that all branches of astronomy are absolutely dependant upon its results.

The great reflector is a photographic instrument.

The grating used for breaking up the light into its various color bands would have but little use if it could not be registered on the photographic plate

Each color band has been analyzed so that it is possible to tell just what substances of which a luminous body is composed.

An interesting experiment along these lines may be tried out with an ordinary projector using an arc light

Project the beam of light through a prism using a very narrow slit; then after careful focusing, drop a small piece of copper in the crater of the lower carbon The spectrum colors on the screen will immediately change

Continue the experiment with as many different metals as you like and you will find that no two are alike

This is the general idea of how the astronomer can tell you the composition of any of the great suns

In no branch of the photographic business has color separation been carried to the extreme limit as it has in breaking up the rays with the wonderful instruments used today.

Instruments for Eclipse

Professor Biefeldt will make observations for the infra-red spectrum of the flash

Dr Stebbins will work with a very sensitive instrument known as a photo-electric photomometer for measuring the light of the solar corona

This instrument is of very recent development.

Dr George Isham, an ardent amateur astronomer, will bring his own moving picture apparatus to register the various effects of the corona

Many thousands of dollars have been spent for equipment The greatest lens makers, the finest mechanics have worked in conjunction with the most eminent scientists from all over the globe in preparation for this coming event in order that the most will be accomplished in the limited time. Enough data and pictures will be obtained to keep the scientists and laymen busy for generations to come.

Our Descendants' Efforts

Who knows but that the amateur of today by accident may settle some of the great arguments of the future.

I rather like to visualize the gathering of the scientists for a similar purpose on August 12, 2045

They will, no doubt, refer to the efforts of today and I wonder how much of our work will be a joke and how many of our pet ideas will be junked

One thing we know they will give us credit for—that this is the most earnest effort ever put forth to seek the truth, the finest example where money has assisted brains, a perfect union of ideals, energy and mechanism and with all they may have accomplished, I do not doubt that much of their knowledge will be based on the pictures made in 1923

Being ill and forbidden by the physician to leave her home didn't prevent Evelyn Brent from appearing in final scenes of Metro's "Held to Answer," recently, thanks to the resources of modern cinematography.

Harold Shaw, director, and Georges Rizard, A S C., accompanied by electricians and other assistants, moved their paraphernalia from the studio into Miss Brent's boudoir at her Hollywood apartment, where, under the watchful eye of the nurse, the needed scenes for the production were obtained.

Our New Telephone Numbers:
Hollywood 8923; 433-930

CRECO

Trade Mark

Electric Studio Equipment

Our New Address:

923 COLE AVENUE

HOLLYWOOD

John (Mike) Shannon says:

"California is the greatest chicken state in the Union. There are more 'Coops' on the 'lots' in Hollywood than anywhere else on earth.

"If you don't believe it, ask any A. S. C."

COOPER HEWITT ELECTRIC CO.
Pacific Coast Representative
KEESE ENGINEERING CO.
Los Angeles, Calif.

FOR SALE

One Debrie Camera with dissolving shutter, etc.; four different lenses, sight magazine boxes; one tripod with Mitchell base and Debrie tilthead; one supporting arm with bellows, special matt box, etc., three carrying cases and several other accessories.

This very complete outfit is in perfect condition. It cost me, including all improvements, $2275. I will sell it for $700 cash.

GEORGES BENOIT

6462 LA MIRADA AVE., HOLLYWOOD. HOLLY 8046.

Motor Accessories
Tires, Vulcanizing
Phone
Holly 4313

MULLER BROS.

"EVERYTHING FOR THE AUTO"

6380 Sunset Blvd. Hollywood, Cal.

Reflectors

(Continued from Page 7)

we find that a scene in a certain house, barn or the like is wanted. It wouldn't pay to build it at the studio, so an attempt is made to shoot the scene on location. It may be the inside of a log cabin or a hallway or, for instance, a room which, although it may have two windows, does not admit sufficient light to allow proper exposure on a character who is to be filmed within its confines. The sun may be shining outside, but it may not be throwing its rays within the room. The solution may seem difficult, but it is a comparatively easy matter for the experienced cinematographer to. First, place a mirror in the sunshine outside so that the sunlight is reflected through one of the windows of the room, and second, to place the reflector inside the room so that it catches the mirror's reflection of the sunlight as it streams into the room. The reflector in turn is arranged so that it relays the sunlight on those portions of the room which it is desired to light.

Or, if the action is to take place in a far corner of the room, so that complications in angles arise, a mirror may be placed inside the room to catch the sunlight that is reflected by the first mirror on the outside. The second mirror in turn can be used to direct the sunlight to the reflectors, which are to do the actual lighting of the characters that are to be photographed.

Eliminating Back Glare

Even with the use of reflectors, a glare very often confronts the cinematographer when stretches of desert or water are used as a background. The experienced camera artist, however, eliminates the intense light by placing black mesh cloth behind the players, near enough so that it will not photograph. The cloth is cut wide and high enough so that it may be held by someone who will not come within the line of the scene's action. The result is a stereoscopic effect and the elimination of the glare, if the reflectors used in the scene have been handled properly.

Some time ago I was photographing a star, who was a blonde with very light blue eyes. In order to make her eyes look impressive and dark, as blue eyes never film as well as dark eyes, I had to do quite a bit of experimenting. My first idea was to use a yellow filter, which I did. While it made her eyes appear dark and pleasing, the effect of the filter made the dark people in the scene appear relatively darker, all of which was very unnatural. At last I found the way out. I placed a yellow or gold leaf reflector on the star and at the same time directed the light from white reflectors to the other people in the scene. The result was that the star had the dark eyes that she so desired, while the other players photographed naturally.

Thus we see that to be a master of reflectors, one must first be a master of artificial lighting, for these two lighting factors go together. The use of reflectors requires just as much study as the use of lights and only when the cinematographer has thoroughly learned the use of these artificial lights can he successfully manipulate the various kind of reflectors.

If the cameraman, on going out on location, will provide himself with the various kinds of reflectors and study their application, then he can be assured of the best quality of photography that the sun's rays will produce.

CINEMA STUDIO SUPPLY TAKES OVER WINFIELD-KERNER LIGHT AGENCY

The Cinema Studio Supply Company of Hollywood, has become the authorized agent of Winfield Kerner lights.

R. (Speed) Hostatter is manager of the studio supply organization.

Cinematographers Attention

The Bausch & Lomb Ultra Rapid Anastigmat is the first successfully produced anastigmat working at the speed of F:2.7.

Also fulfills the requirements for color photography.

Lenses of higher speed so far on the market are not anastigmats and do not cover standard motion picture film with precision. Some even fail to meet the rated speed.

Supplied with completely closing diaphragm, for "fade-outs."

A lens can be secured on trial through your dealer, or from us. Write for complete description and prices.

Bausch & Lomb Optical Co.

NEW YORK WASHINGTON CHICAGO SAN FRANCISCO LONDON ROCHESTER, N.Y. FRANKFORT

TITLES ART BACKGROUNDS

H.C. Jacobsmeyer Co.

HOLLY 482

FOR RENT

Two Bell and Howell Cameras, 40, 50, 75 mm. lenses, Thalhammer Iris. Jean Trebaol, Jr., 7042 Stilson Street, Palma, Calif. Telephone 761-243.

WANTED—Stinsman Developing Outfit, 100-ft. Write at once, description and price.

Box 1037, New Haven, Conn.

"Fade Out and Slowly Fade In"

(Continued from Page 4)

"Cashier" Had Color

We must not for a minute forget, however, one of the most important factors in the color scheme of the lobby and that was the many-dutied young lady, invariably a blonde, whose chief duty was to sell tickets. Of course the peroxide hair—and they used peroxide profusely in those days—was not the only color note in the young lady's make-up.

The young lady's activities were not confined to ticket selling but it was a part of her duties to rewind all of the nickelodeon's film that the operator handed down to her through a very small trap door between the ceiling of her booth and the projection room which was located immediately over her head

When Jazz Was Ragtime

Besides the flare of the gaudy melodramatic posters which had been first used to advertise "The Way of the Transgressors," or "Billy the Kid" on the stage, the nickelodeon lobby's attractions were further enhanced by a phonograph of the old cylinder type which ground off such favorite strains as "Won't You Come Over to My House," "Over to Long Island City," "Pony Boy," etc. The care and the winding of the phonograph were trusted variously to the cashier, the proprietor and the projectionist

"Difficult" Examination

Now let us visit the operator, as the projectionist was then called. The fire underwriters had just adopted a law that the operator must pass an examination in order to handle a projector. He had to be able to detect a "ground" in his "lamp house," hook up a rheostat, tell the "polarity" or the difference between "positive" or "negative." Having passed the foregoing strenuous examination he was given a license.

Fire Prevention Cares

The projectors in those days were either Edison wooden hose exhibition models or Powers cameragraphs which two types of machines were the most popular. The latter had been lately equipped with a fire shutter which was designed to prevent the arc from hitting directly on the film and thus causing a fire. It was of the spring type and undue care had to be exercised by the operator not to press the crank of the projector before starting, as the shutter had a tendency to jump up and expose the film to the arc.

Film Tickled Audience's Ears

Magazines about this time had just become standard equipment, eliminating the boxes formerly used to keep the film from landing in the audience when it filled up the box and "ran out" over the sides

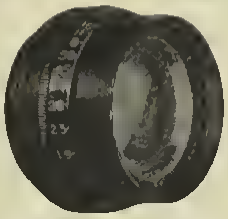
All for $15 a Week

An operator's salary was $15 00 a week. His duties, besides those already touched upon, were to go down to the exchange each morning, select a program of five reels for that day, and, in addition, to letter the captions which were pasted above the lithographs in the lobby. The show usually started at 2 p. m. and went through until 11 p. m. If the owner did not act as operator at supper time, the operator cranked with one hand and ate his sandwich with the other, meanwhile feeding the arc with his teeth. One manager, whom I remember in particular, would produce a couple of African golf balls after the last show on Saturday and allow the employes to lose their loose change—and many times more than that—in the proceedings which followed. And so it went.

Most of my time in a nickelodeon was spent at the foot of the operator's "coop," as the projection booth was called, admiring the operator's wisdom, knowledge and greatness The crank of the projector charmed me as the Hindoo charms the snake.

WE HAVE MOVED TO
201 N. OCCIDENTAL BLVD.
(Realart Studio)
GREATLY INCREASED FACILITIES
QUICKER SERVICE
SAME HIGH QUALITY
We Will Also Make Release Prints
in Our New Location
ROY DAVIDGE & CO.
FILM LABORATORIES
(Formerly Harold Bell Wright Laboratories)
PHONE DREXEL 6622

The ULTRASTIGMAT-f 1.9



Speed, flatness of field and critically sharp definition are features of this perfect lens for Motion Picture Cameras. Effects can be secured with this lens under conditions which would yield no results with lenses of smaller aperture.

Ask your dealer for descriptive folder—or write us.

IT'S ALL IN THE LENS

GUNDLACH-MANHATTAN OPTICAL CO.,
Clinton Ave., South Rochester, N. Y.

Keep in touch with the technical and production progress of the motion picture industry. Enter your subscription and those of your friends for the American Cinematographer.

The American Cinematographer—

Herewith find $3.00 to pay for one year's subscription to The American Cinematographer, subscription to begin with the issue of ..... 1923.

Name .....

Address .....

How Ladies Make Future Cinematographers

Being a shrewd business man, the operator at the particular nickelodeon, where I gleaned my knowledge, realized a possibility of utilizing my ambitions to his advantage and proceeded, after some acquaintance, to allow me to rewind the reels as he lowered them through the trap in the floor But the operator, being human as we all have been since Adam and Eve, slowly capitulated to the admirations of the fair sex and lost no opportunity to converse with one of his many admirers. On such occasions he would conscript me into service, so that turning the projector's crank, thanks to the lures of the opposite sex on some one else, soon became natural to me.

It did not take me long to learn to turn at the correct speed. You can imagine how proud I was when, after a time, the operator permitted me to run the song slides. I made the common mistake of turning one of the slides up-side-down in the middle of "Pony Boy," but I was not allowed to remain ignorant of my mistake long, for the audience was always ready to politely remind me of what I had done by a gentle applause of their feet against the floor.

Operator Had Vocal Ambitions

Strange enough—for all operators were looked upon with envy in those days—my friend, the operator, sold the owner the idea that he could save him money by singing the illustrated song, so it became my duty to operate the song slides without any supervision I must admit that as a singer my friend was a good operator.

Extensive Staff

The comfortable nickelodeon chairs were of the folding camp and were nailed together in rows by the means of two by two's. A piano with a player who had a repertoire which consisted of "Hearts and Flowers" and some Indian melody furnished the music on the inside while the phonograph, suffering a chronic cold, coughed unsteadily away on the outside Besides the proprietor, the cashier and the operator, the theatre staff consisted of the doorkeeper who was usually the proprietor.

Pathe films of the famous rooster brand were the most popular. Each reel of one thousand feet contained numerous subjects, such as a scenic shot made in front of a locomotive, a risque comedy wherein the maid entertained the policeman when the master and mistress left the home, all of which was followed by the inevitable chase I well remember "The Runaway Horse," "The Great Train Robbery" and others

The Bouncer

The nickelodeon proprietor in those days faced the problem of emptying his house as fast as possible Many who entered his place of business would not leave at the end of one show, but would remain for as many as two, three or more. It was the custom, at the end of each show, to give those who did not depart a ticket torn in half in order to establish that they had seen one performance. If they were still there with their half ticket at the end of the next show, they were politely requested to get out. Of course the system had many loopholes and many arguments resulted, but that was all a part of the day's work. Later the staff was augmented by a typical Bowery bouncer whose duty it was to take care of such altercations

Of course the ingenuity of the operator did not remain idle. It was he who was depended on to grind the film through as fast as possible so that the house could be emptied in as short a time as possible.

Evolution—what a wonderful thing; human ingenuity—what it has accomplished. What more will it accomplish?

(To be continued)

PUBLIC SALES

We have purchased 125,000 pair U. S. Army Munson Last Shoes, sizes 5½ to 12, which was the entire surplus stock of one of the largest U. S. government shoe contractors.

This shoe is guaranteed 100 per cent solid leather, color dark tan, bellows tongue, dirt and waterproof. The actual value of this shoe is $6.00. Owing to this tremendous buy we can offer same to the public at $2.85.

Send correct size. Pay postman on delivery or send money order. If shoes are not as represented we will cheerfully refund your money promptly upon request.

National Bay State Shoe Company

296 Broadway, New York, N. Y.

SCHEIBE'S PHOTO-FILTER SPECIALTIES

are now popular from coast to coast, and in some foreign countries.
If my many varieties do not always fill the bill, tell me your wants and I will make them on special order.
Always at your service.

GEO. H. SCHEIBE
1636 Lemoyne St. Los Angeles, Cal.

FOR RENT or FOR SALE
Bell & Howell Outfit
Jack Wilson
Hollywood 4070 (During Day)
Chaplin Studios, Hollywood

MORE THAN A MAGAZINE—

The American Cinematographer records, from month to month, the research and findings of the best minds in the technical branches of the motion picture industry. It is a great instructive as well as entertaining power

American Camera Instruments In Foreign Lands

Indicating the extensive fields which the American camera products reach, Carl L. Gregory, well known cinematographer and author of numerous books and writings on motion picture photography, who has been globe trotting during the past year and a half, writes to J. H McNabb, general manager of the Bell & Howell Co., as follows:

"I saw Bell & Howell Cameras in studios in Hawaii, Japan, China, Philippines, Malaya, Burma, India, Italy, France and England.

"'Standard of the World'—there's a good slogan for you.

"Saw Cowling in Bombay."

New Administration Building Finished

The new administration building erected by John M. Nickolaus and S M Tompkins of Standard Film Laboratories on their seven-acre tract in Hollywood has been completed. Executive headquarters of the organization have been moved to the new structure, which is just south of the main laboratories building in Seward street. Landscape gardeners are making extensive improvements in the grounds

In addition to suites of offices for members of the laboratories, space has been provided for a number of independent producers who wish to make their permanent headquarters where their film is developed and printed. Dallas FitsGerald, who has directed a number of independent features, is the first to establish himself in the new building It is planned to start soon upon the construction of a small preview theater, which will form a left wing in the rear of the new office building. Additional office space will be provided in a right wing to be built in the near future, according to Mr. Nickolaus and Mr. Tompkins

$1,000,000.00
TO LOAN
AGAINST COMPLETED
MOTION PICTURE NEGATIVES.
RELEASE PRINTS FINANCED.
COMMERCIAL TRADERS
CINEMA CORP.
128 WEST 52ND ST., NEW YORK

Harry Brown, electrical authority and a former president of the Electrical Illuminating Engineers Society, has left his post as chief of the electrical department at Universal City, to accept a similar position at the Hollywood Studios. Brown handled the problem of supplying electricity for "The Hunchback of Notre Dame," which Robert Newhard, A. S. C., filmed.

Ben Reynolds and Allan Davey are no longer A. S. C. members.

While the theatergoing public is still nursing overworked risibilities as the result of Douglas MacLean's recent success in "The Hottentot," another nation-wide epidemic of laughter is reported as gravely imminent The negative and master print of MacLean's first independent production, "Going Up," photographed by Ross Fisher, A. S. C., have been shipped East by Standard Film Laboratories and exhibitors are being warned throughout the country to have their seats more firmly riveted to the floor.

RELEASES

July 22nd, 1923, to August 12th, 1923

TITLE	PHOTOGRAPHED BY
"Skid Proof"	Don Short, member A. S. C.
"Tha Miracle Baby"	Wm. Thornley
"Loyal Lives"	Edward Paul
"Blueheard's Eighth Wife"	Alfred Gilks, member A. S. C.
"Legally Dead"	Richard Fryer
"The End of the Rope"	Vernon Walker
"Mine to Keep"	Eddie Linden and Jack Stevens
"A Man of Position"	Kenneth MacLean, member A. S. C.
"Out of Luck"	Virgil Miller
"The Midnight Alarm"	Steve Smith, Jr., member A. S. C.
"Hollywood"	Karl Brown, member A. S. C.
"Little Old New York"	Ira H. Morgan, member A. S. C.
"A Gentleman of Leisure"	Faxon M. Dean, member A. S. C.
"The Love Brand"	Wm. Thornley
"Mignon"	L. Kurtleb
"Lawful Larceny"	Hal Roseon
"The Flying Dutchman"	Andre Barlatier, member A. S. C.
"The Eleventh Hour"	Don Short, member A. S. C.
"Trilby"	Georgea Benolt, member A. S. C.
"The Purple Highway"	George Webber and Henry Cronjager, member A. S. C.
"Broken Hearts of Broadway"	J. R. Diamond
"Man and Wife"	Not Credited
"The Brass Bottle"	Arthur Todd
"Tha Green Cat"	Robert V. Doran, member A. S. C.
"Plus and Minus"	Francis Corby, member A. S. C.
"Her Fatal Millions"	John Arnold, member A. S. C.
"Itching Palms"	William Marshall, member A. S. C.
"Soft Boiled"	Dan Clark, member A. S. C.
"Circus Daya"	Frank B. Good, member A. S. C.
"The Victor"	Clyda Da Vinna
"Broadway Gold"	J. R. Diamond

HOW TO LOCATE MEMBERS OF THE

American

Society of Cinematographers

Phone Holly 4404

OFFICERS

James C. Van Trees	President
John F. Seitz	First Vice-President
Charles Van Enger	Second Vice-President
Victor Milner	Third Vice-President
Frank B. Good	Treasurer
Philip H. Whitman	Secretary

BOARD OF GOVERNORS

Gaetano Gaudio — Frank B. Good — Paul Perry
Victor Milner — Fred W. Jackman — Charles Van Enger
Robert Kurrle — Jackson J. Rose — John F. Seitz
James Van Trees — Charles Stumar — Philip H. Whitman
Arthur Edeson — Homer A. Scott — L. Guy Wilky

Abel David—with Warner Brothers
Arnold, John—with Viola Dana, Metro Studio
Bartlatier, Andre—Graf Prods., San Mateo
Barnes George S—with Cosmopolitan, New York
Beckway, Wm—
Benoit, Georges—
Broening H Lyman—
Brodin, Norberl F—Frank Lloyd Prods., First National, United Studios
Bergquist Rudolph J—with Clarence Badger.
Brotherlon, Joseph—with Fox
Brown, Karl—with James Cruze, Lasky Studio.
Cann Berl—Europe.
Clark, Dan—with Fox.
Corby, Francis—with Hamilton-White, Fine Arts Studios
Cowling, Herford T—Travel Pictures, Asia.
Cronjager Henry—with Lasky Studio New York
Dean, Faxon M—with Joe Henebery, Lasky Studio
Depew, Ernest S—with Al St. John, Fox Sunshine
Doran Robert S—with Roach Studio
Dored, John—Scenic, Rueola, Pathe
Dubray, Joseph A—with R-C Studio
DuPar, E B—with Warner Brothers
Du Pont, Max H—with Douglas MacLean, Hollywood Studios
Edeson, Arthur—with Douglas Fairbanks, Fairbanks-Pickford Studio.
Evans Perry—First National Prods., United Studios
Fildew, William—with Tod Browning, Goldwyn
Fisher Ross G—with Emory Johnson, R C Studio
Fowler, Harry M—with Universal
Gaudio, Tony G—with Norma Talmadge, Joseph Schenck Productions, United Studio
Gilke, A L—with Sam Wood, Lasky Studio
Good, Frank B—with Jackie Coogan, Metro Studio
Granville, Fred L—directing, British International Corp., London
Gray, King—Willat Studios
Griffin, Walter L—
Guissart, Rene—with Graham Wilcox Prods., in charge of photography, London
Heimerl, Aloie G.—
Jackman, Floyd—with Fred Jackman, Roach Studio
Jackman, Fred W—directing, Roach Studio
Kline, Ben H—with Universal.
Koenekamp, Hans F—with Larry Semon, Vitagraph Studio
Kull Edward—with Universal
Kurrle, Robert—with Phil Rosen, Rockett-Lincoln Productions, Mayer Studio.
Landers, Sam—with Joseph De Grasse, First National, United Studio.
Lockwood, J. R.—
Lundin, Walter—with Harold Lloyd Prods., Hollywood Studios.
MacLean, Kenneth G—with Bryant Washburn Grand Studio
Marshall William—with Benny Zeldman Prods., Principal Studio
Meehan, George—with Jack White Corp., Fine Arts Studio
Milner, Victor—with Fred Niblo, Clune's Studio
Morgan, Ira H.—Marion Davies—Cosmopolitan, New York.
Newhard, Robert S—
Norton, Stephen S—
Overbaugh, Roy F—with Richard Barthelmess, New York City
Palmer, Ernest S—
LePicard, Marcel—
Perry, Harry—with Preferred Productions, Mayer Studio
Perry, Paul P—with Ernest Lubitsch, Warner Bros
Polito, Sol—with Edwin Carewe, United Studio
Richardson, Charles—With Garson Studios
Ries, Park J—
Rizard, Georges—with Metro Studio
Rose, Jackson—
Rosen, Philip E—Directing Life of Abraham Lincoln Rockett-Lincoln Productions, Mayer Studio
Rosher, Charles—with Mary Pickford Pickford-Fairbanks Studio
Schneiderman, George—Fox Studio
Schoenbaum, Chas E—with Lasky Studio
Scott, Homer—
Seitz, John F.—with Rex Ingram, Metro Studio
Seigler Allen—Cosmopolitan, Hollywood Studio
Sharp, Henry—with Ince Studio
Short, Don—with Fox Studio.
Smith, Steve, Jr—with Vitagraph Studio
Steene, E. Burton—New York
Stumar, Charles—with Universal
Stumar, John—with Universal
Thorpe, Harry—with Lou Anger Prods
Totheroh, Rollie H.—with Charlie Chaplin. Chaplin Studio.
Van Enger, Charles—with Victor Seastrom, Goldwyn Studio.
Van Trees James—with First National, United Studio
Walter, R W—with Mack Sennett Productions, Sennett Studio
Warrenton Gilbert—with Cosmopolitan New York
Whitman, Phillip H—with Douglas Fairbanks, Fairbanks-Pickford Studio
Wilky, L. Guy—with William De Mille, Lasky Studio.

Edison, Thomas A—Honorary Member
Foley, William "Daddy"—Honorary Member.
Webb, Arthur C—Attorney

Meetings of the American Society of Cinematographers are held every Monday evening in their rooms, suite 325, Markham Building. On the first and the third Monday of each month the open meeting is held; and on the second and the fourth, the meeting of the Board of Governors.

LOYALTY **PROGRESS** **ART**

Hollywood News Prin

JUST RECEIVED

A few new Bausch & Lomb lenses, 32 mm F.3.5 for immediate delivery.

To those that know, no comment necessary as to the lens. FULL CLOSING DIAPHRAGM.

MITCHELL CAMERA CORPORATION

6025 Santa Monica Blvd. **Los Angeles, California**